

HMS 8X08 / SPB 06X7: EXERCISE PHYSIOLOGY



## **NOVEMBER EXAMINATION**

**PROGRAMME:** SPORT SCIENCE AND BIOKINETICS HONOURS

**MODULE NAME:** EXERCISE PHYSIOLOGY

**MODULE CODE:** HMS 8X08 / SPB 06X7

**DATE:** 11 NOVEMBER 2017

**DURATION:** THREE (3) HOURS

**TOTAL MARKS:** 125 MARKS

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**EXAMINERS:** MR AJJ LOMBARD  
PROF Y COOPOO  
DR HEATHER MORRIS-EYTON

**MODERATOR:** MR J CLARK (UP)

**NUMBER OF PAGES:** THIS PAPER CONSISTS OF TWO (2) PAGES

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### **INSTRUCTIONS TO CANDIDATES:**

**MAKE SURE THAT YOU HAVE THE COMPLETE PAPER**

**ANSWER ANY FIVE (5) QUESTIONS**

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**QUESTION 1**

Discuss the internal mechanisms regulating metabolic pathways involved in bioenergetics. (25)

**QUESTION 2**

Discuss the main biochemical and mechanical properties of skeletal muscle fibre types and their role in sport performance. (25)

**QUESTION 3**

Discuss cardiovascular responses and possible adaptations as a result of aerobic training. (25)

**QUESTION 4**

Discuss the endocrine regulation of blood glucose levels during exercise. (25)

**QUESTION 5**

Discuss physiological responses, performance and acclimatization at altitude. (25)

**QUESTION 6**

The development of pedagogical skills for a coach are important for skill development. Explain this statement in the context of coaching didactics. (25)

**QUESTION 7**

Discuss fuel for exercise under the following headings:

1. Factors influencing fuel choice
2. Fuel intake before and post exercise (25)

**TOTAL: 125 MARKS**